

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Office of Secretary Of Defense	DATE: February 2011
---	----------------------------

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>				PE 0303140D8Z: <i>Information Systems Security Program</i>							
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	12.975	14.077	11.753	-	11.753	11.703	12.075	12.305	12.400	Continuing	Continuing
140: <i>Information Systems Security Program</i>	12.975	14.077	11.753	-	11.753	11.703	12.075	12.305	12.400	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The NII Information Systems Security Program (ISSP) provides focused research, development, testing and integration of technology and technical solutions critical to the Defense Information Assurance Program (10 USC 2224) through pilot programs and technology demonstration; investment in high leverage, near-term programs that offer immediate Information Assurance (IA) benefit; federal and multi-national initiatives; and short-term studies and research critical to protecting and defending information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation. These efforts focus on Computer Network Defense (CND) and the restoration of information systems by incorporating protection, detection, analysis and reaction and response capabilities; emerging cryptographic technologies; technology transition and IA research capabilities. This program is designed to meet the requirements of 10 USC 2224 (Defense Information Assurance Program), 44 USC 3544, (Federal Information Security Management Act of 2002), OMB Circular A-130, and DoD Directives 8500.1, and 0-8530.1. This program is funded under Budget activity 7, Operational System Development because it integrates technology and technical solutions to the Defense Information Assurance Program.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	14.995	14.077	14.360	-	14.360
Current President's Budget	12.975	14.077	11.753	-	11.753
Total Adjustments	-2.020	-	-2.607	-	-2.607
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-1.600	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustment	-0.420	-	-	-	-
• OSD Studies Contracts Efficiency	-	-	-1.136	-	-1.136
• DoD Service Support Contracts Efficiency	-	-	-0.746	-	-0.746
• Economic Assumptions	-	-	-0.016	-	-0.016
• NII Contractor Efficiency	-	-	-0.709	-	-0.709

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Office of Secretary Of Defense		DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0303140D8Z: Information Systems Security Program		
<p><u>Change Summary Explanation</u></p> <p>FY 2010: Reprogram Congressional Add to O&M -1.600 million, Program adjustment -0.420 million. FY 2011: No change. FY 2012: Economic Assumptions -0.016 million, OSD Study contracts efficiency -1.136 million, NII Contractor efficiency -0.709 million, DoD Service Support Contracts efficiency -0.746 million.</p> <p>Studies contract Efficiencies will be realized by reducing the number of studies that we participate in while still supporting enterprise-wide information technology goals critical to DoD Mission. Service Support Contract efficiencies will be realized by reducing the reliance on DoD Service Support Contractors by utilizing in-house government support in a constrained personnel and resource environment. NII reduction to contractor staff efficiencies will be realized by continuing to provide policy, guidance, program oversight, and resource management for command and control (C2), communications, spectrum, information assurance, and Information Technology programs with significantly less contractor support. Economic Assumptions will be realized by reducing our reliance on contractors while still achieving OASD(NII)/DoD CIO goals and objectives while in a constrained personnel and resource environment.</p>				
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012
Title: Information Systems Security Program Plans and Accomplishments		12.975	14.077	11.753
FY 2010 Accomplishments:				
<ul style="list-style-type: none">• Reduced the DoD's cyber "attack surface" at the DoD's Internet-NIPRNet boundary gateways through a new IA enterprise architecture and its associated implementation plan. The Phase 1 implementation of the new design proved highly successful in that it stopped hundreds of thousands of external unsolicited Internet-NIPRNet transactions per day, thereby allowing a more rigorous monitoring of the transactions that did enter the GIG. ASD NII brought together network engineering and architectural experts from over 30 DoD services and agencies to work with DISA and NSA to develop and begin implementing an architectural design that increases GIG protection, optimizes internet bandwidth usage, and fields a suite of advanced NSA and IA capabilities at each gateway.• Lead the DoD cyber security community in a year-long effort to generate an integrated IA Plan V1.0 that was the DASD CIIA's number one priority. The DoD IA Plan V1.0 sets synchronized baseline capabilities, identifies gaps, and projects activities, resources, and personnel to close the gaps. CDR USSTRATCOM and the new Director CYBERCOM stated the IA Plan will be a critical element of the new comprehensive STRATCOM OP ORDER for Computer Network Operations.• Continued refinement of IA architecture, policy and IA capabilities necessary to support "end-to-end" IA capability for the GIG-including enterprise services such as discovery, collaboration, messaging, mediation, data tagging, etc. Support technology				

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Office of Secretary Of Defense		DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>		R-1 ITEM NOMENCLATURE PE 0303140D8Z: <i>Information Systems Security Program</i>		
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012
<p>demonstration, development and pilots focusing functions required in mid-term (2009-2012) increment of the IA Component of the GIG architecture.</p> <ul style="list-style-type: none"> • Further developed and refined engineering in-depth and vulnerability detection to support the DoD Software Assurance Strategy. • Continued refinement of SAST to provide more robust and realistic T&E, training and exercise environment. Improvements include creation of a virtual or “fake” internet, instrumentation to support CEMAT collection capabilities, DoD CAC Engine and new traffic protocols in support of IA joint exercises and the Department’s international exercise program. • Continued refinement of CND improvements for integration and certification to support interoperability and operational initiatives including additional data feeds, small agency SCAP data collections, authentication and authorization, SCAP remediation standards and continued development/validation of CND data-standards. <p>FY 2011 Plans:</p> <ul style="list-style-type: none"> • Continue refinement of IA architecture, policy and IA capabilities necessary to support “end-to-end” IA capability for the GIG- including enterprise services such as discovery, collaboration, messaging, mediation, data tagging, etc. Support technology demonstration, development and pilots focusing functions required in mid-term (2009-2012) increment of the IA Component of the GIG Architecture. • Further develop and refine engineering in-depth and vulnerability detection to support the DoD Software Assurance Strategy. • Continue refinement of SAST to provide more robust and realistic T&E, training and exercise environment. Improvements include creation of a virtual or “fake” internet, instrumentation to support CEMAT collection capabilities, DoD CAC Engine and new traffic protocols in support of IA joint exercises and the Department’s international exercise program. • Continue refinement of CND improvements for integration and certification to support interoperability and operational initiatives including additional data feeds, small agency SCAP data collections, authentication and authorization, SCAP remediation standards and continued development/validation of CND data-standards. <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> • Continue refinement of IA architecture, policy and IA capabilities necessary to support “end-to-end” IA capability for the GIG- including enterprise services such as discovery, collaboration, messaging, mediation, data tagging, etc. Support technology 				

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Office of Secretary Of Defense		DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>		R-1 ITEM NOMENCLATURE PE 0303140D8Z: <i>Information Systems Security Program</i>		
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012
<p>demonstration, development and pilots focusing functions required in mid-term (2009-2012) increment of the IA Component of the GIG Architecture.</p> <ul style="list-style-type: none"> • Further develop and refine engineering in-depth and vulnerability detection to support the DoD Software Assurance Strategy. • Continue refinement of SAST to provide more robust and realistic T&E, training and exercise environment. Improvements include creation of a virtual or “fake” internet, instrumentation to support CEMAT collection capabilities, DoD CAC Engine and new traffic protocols in support of IA joint exercises and the Department’s international exercise program. • Continue refinement of CND improvements for integration and certification to support interoperability and operational initiatives including additional data feeds, small agency SCAP data collections, authentication and authorization, SCAP remediation standards and continued development/validation of CND data-standards. • Develop Computer Network Defense data standards (NIST SCAP) to support IA command and control through increase situational awareness and machine-to-machine automation. • Pilot and operationalize data standards efforts (NIST SCAP); provide validation of current and emerging standards and interfaces for sustained operational use. • Develop and update DoD policies related to wireless and mobile computing as required. <p>Develop new IA policies related to emerging mobile technologies where mobile devices are considered part of the global information grid.</p> <ul style="list-style-type: none"> • Provide IA Enterprise Services support in the development of DoD-enterprise cloud computing adoption strategy. 				
Accomplishments/Planned Programs Subtotals		12.975	14.077	11.753

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Office of Secretary Of Defense	DATE: February 2011
---	----------------------------

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303140D8Z: <i>Information Systems Security Program</i>
---	--

D. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u> <u>Base</u>	<u>FY 2012</u> <u>OCO</u>	<u>FY 2012</u> <u>Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 0303140D8Z: <i>Information System Security Program</i>	15.939	13.682	13.985		13.985	13.895	14.140	14.507	15.055	Continuing	Continuing

E. Acquisition Strategy

N/A

F. Performance Metrics

- SAST supports CEMAT capability
- SAST available as a core enterprise IA/CND simulation tool
- CEMAT effectively supports T&E community data collection, reduction, analysis and reporting

UNCLASSIFIED